

Novel Azo-Dyes-Modified Isatin Derivatives: Synthesis, UV/VIS Spectroscopic, and Electrochemical Study

Musin L., Abdullin I., Vandyukov A., Yakhvarov D., Zinnatullin R., Mironov V., Bogdanov A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016 Wiley-VHCA AG, Zürich A high-yield and simple synthesis of certain aminomethylisatins bearing dye fragments via the Mannich reaction of isatin with amino-containing azobenzenes was reported. It was found that the absence of electron-donating groups in azo-dye molecule prevents aminomethylation of isatin. The effect of the incorporation of an isatin moiety with an azobenzene dye in one molecule on its absorption and electrochemical behavior was studied using UV spectroscopy and cyclic voltammetry.

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Keywords

Azo-dyes, Cyclic voltammetry, Isatin, Isoindigo, UV/VIS spectroscopy